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**Attorney Docket No.:**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**SERIAL NO.:** 10/765494                      **ART UNIT:** Not Yet Assigned  
**APPLICANT:** Paul Steven Dowdy                      **EXAMINER:** Not yet Assigned  
**FILING DATE:** January 27, 2004  
**TITLE:** Collision Avoidance Method and System

**DECLARATION UNDER 35 USC § 132**

Commissioner for Patents  
Washington, D.C. 20231

1. I, Paul S. Dowdy am the inventor named on the above identified patent application.
2. Applicant wishes to apprise the Examiner of the following experimental activity relating to the development of the technology disclosed in the patent application.
3. Sometime in August, 2002, I discussed with Raymond Hopkins (Port Captain) in ARTCO (American River Transportation Company) regarding existing practical collision avoidance alarm systems and the need for an improved solution.
4. Sometime later that month, ARTCO requested that I pursue my ideas. In August and September of 2002, I developed an experimental prototype and installed it on the Inez Andreas, a working tug on the Mississippi river. The experimentation involved determining alarm timing, sensitivity to vibration, installation time, effect on crew and RFI (Radio Frequency Interference). The prototype used parallel timers and external timing controls, and it had no test switch, no visual alarms and no pulsed audio.
5. In April of 2003, a first production test unit was installed on the Cooperative Sprit, another tug on the Mississippi River. This unit had a test switch, a fixed timing (first alarm: 2 minutes, second alarm: 2 minutes, 30 seconds). With this unit,

parallel alarms using pulsed audio with LED indicators were implemented. From this testing, it was determined that the sensors were too sensitive to vibration.

6. In September of 2003, the sensor sensitivity was successfully corrected with reduced gain on the input circuitry and false alarms were eliminated by cascading timers. The test switch circuit was reconfigured, and the new unit was grounded to the vessel. In October of 2003, the unit was reconfigured to accept a switch inputs from the vessel throttles. These units were tested successfully, so by November of 2003, testing was completed with the results being satisfactory.
7. If the Examiner needs any additional information, please contact applicants' representative and he will provide whatever additional information is necessary.
8. The filing of this Declaration shall not be construed as a representation that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).
9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Date: 6-24-04

By:

  
Paul S. Dowdy